

SOUTH AUSTRALIAN SOCIETY OF MODEL  
& EXPERIMENTAL ENGINEERS

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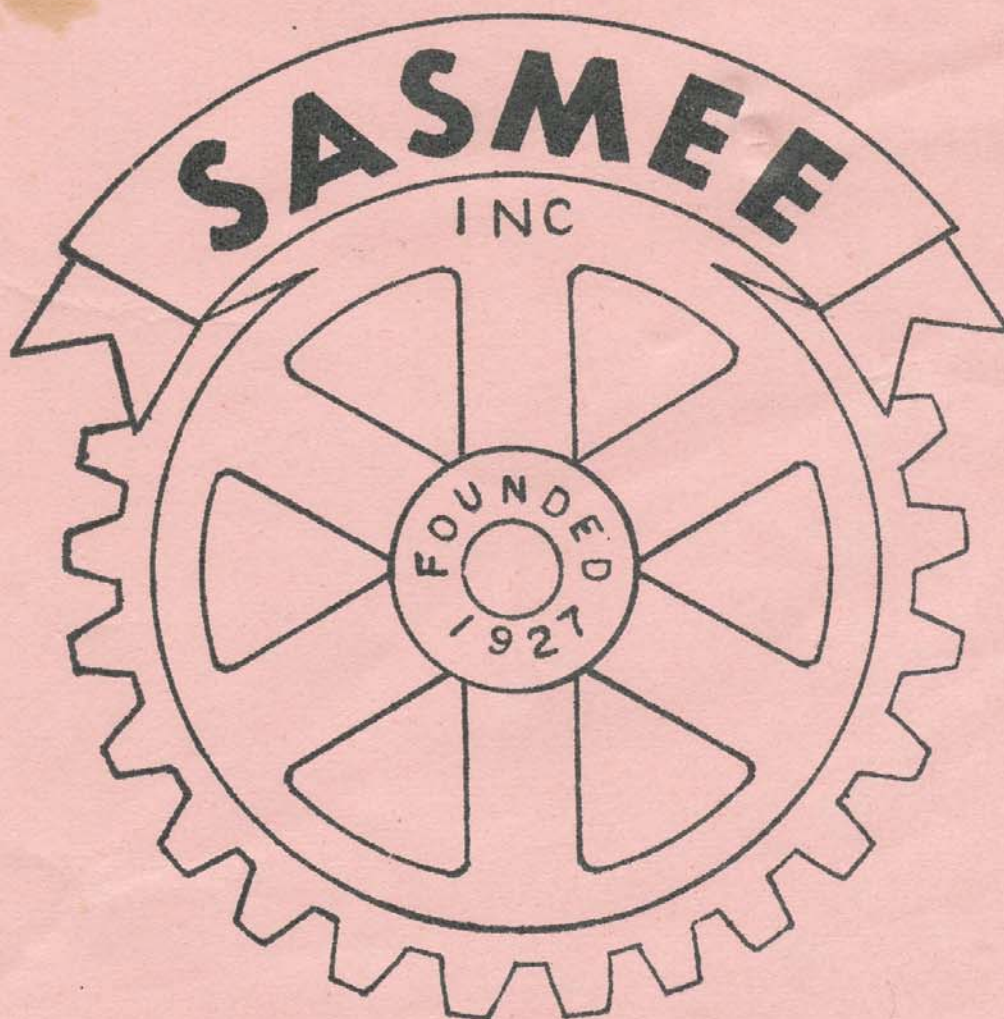
**S A S M E E**

DEC '72 FEB '73

# BULLETIN

THE OFFICIAL JOURNAL OF THE SOUTH AUSTRALIAN SOCIETY

OF MODEL AND EXPERIMENTAL ENGINEERS.





EDITORIAL

Vol. 13 No.3

Dec.1972-Feb.1973

When reading of various exploits such as mountaineering, sailing around the world solo, Arctic exploration and other hazardous exploits, one speculates on what makes a man do these things. Love of adventure or perhaps their hobby! In a similar vein a man can become a devout devotee of golf and other recreations.

Here perhaps exercise is possibly one of the reasons, plus the social life which goes along with such recreations. But as you have by now probably guessed, what induces a man to become a model engineer.

Except on a Field Day exercise can be ruled out and spending thousands of hours in his workshop mostly on his own can hardly be called a craving for social life excepting a Club meeting night, or perhaps a friend or two might drop around for an hour or so, just what is the fascination of modelling which impels one to spend his leisure time in many cases of his whole life building replicas in miniature of some masterpiece of engineering.

What strange force causes a perfectly normal being to forsake the comfort of a warm room, a comfortable chair and a good book to spend his evenings in a good many cases in a cold and draughty workshop, sometimes until midnight, striving for perfection on his beloved model. I have been asked this question plenty of times and have given reasonable replies, but the real answer, a kind of unknown factor still seems to elude me. The strange part is that only a minority of modellers are connected with the engineering world. We are drawn from all walks of life, bound together with a common bond to design, build and create something with our own hands.



To the man who builds a model loco, there is a lot more to it than just 'playing trains'. By simply closing his eyes he puts himself on the footplate of a mighty "Pacific" controlling with his two hands possibly several thousand horsepower and enjoys the thrill of power such an engine can give. The builder of model ships can create the illusion of captaining a mighty Atlantic liner with several thousand lives in his hands, putting their trust in his skill to bring them safely to port.

Returning to reality it would seem that model building is a many sided thing. It is truly a grand hobby, but there is something far deeper than that about it. Something which is fundamental and although it does not rise to the surface in many people, to those in whom it does, they are to be envied for they shall never know boredom.

It is pleasing to record that Mr. W.D. Saunders, Chief Mechanical Engineer of the South Australian Railways, and Mr. George Nicolson of 'Tregelana' Station Whyalla have each consented to become a vice patron of our Society. We look forward to a long and lasting relationship between us.

On another page, Allan Wallace, a country member, gives us an interesting description of the Leigh Creek coal mining industry.

And now, perhaps a trifle early, may I wish you all a Merry Christmas and a happy and good steaming year.

Clary Burden  
Editor &  
Honorary Secretary

QUARTERLY AGENDA

GENERAL MEETINGS: 2nd Tuesday each month at 8 p.m.

12th DECEMBER: David Price on his experiences in Malaya.

1973

9th JANUARY: Brains Trust

13th FEBRUARY: J. Mell will speak on his recent trip abroad, with slides and tape.

INTERMEDIATE MEETINGS: (Informal) 4th Tuesday each month at 8 p.m.  
December 26th, January 23rd, February 27th

COMMITTEE MEETINGS: 1st Tuesday each month at 8 p.m., December 5th, no January meeting, February 6th.

WORKING BEES: 1st Saturday each month at 2 p.m. December 2nd, January 6th, February 3rd.

PUBLIC FIELD DAYS: 3rd Saturday each month at 2 p.m.  
December 16th, January 20th, February 17th

PLEASE CHECK WITH ROSTER FOR YOUR ATTENDANCE ON CANTEEN

LOCO TRACK SUPERVISORS:

B. Brown, D. Irving, L. Fielder.



FIELD DAY CANTEEN ROSTER

DECEMBER

L. Fielder  
P. Griscti

JANUARY

M. Turner  
B. Niesche

FEBRUARY

A. Goldsworthy  
B. Homan

IMPORTANT NOTICE

IF UNABLE TO ATTEND AS PER ROSTER PLEASE PHONE  
SECRETARY PH.795292 SO THAT A RESERVE CAN BE  
NOTIFIED IN TIME.

PLEASE REMEMBER TO BRING THE MILK

ROSTER FOR LOCKING UP ALL BUILDINGS AND GATES

|                 |                   |                 |                   |
|-----------------|-------------------|-----------------|-------------------|
| <u>November</u> | 11th J. Welch     | <u>January</u>  | 13th J. Welch     |
|                 | 18th D. Irving    |                 | 20th D. Irving    |
|                 | 25th J. Wakefield |                 | 27th J. Wakefield |
| <u>December</u> | 2nd R. Brown      | <u>February</u> | 3rd R. Brown      |
|                 | 9th N. Kernick    |                 | 10th N. Kernick   |
|                 | 16th D. Worrell   |                 | 17th D. Worrell   |
|                 | 23rd I. Clark     |                 | 24th I. Clark     |
|                 | 30th R. Smyth     | <u>March</u>    | 3rd R. Smyth      |
| 1973            |                   |                 | 10th P. Griscti   |
| <u>January</u>  | 6th P. Griscti    |                 | 17th J. Welch     |

ROSTER FOR ASSISTING ON FIELD DAYS

December

N. McLeod

January

W. Kloeden

February

S. Faccenda

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### COMING EVENTS

A tour of 'Sola International' has been arranged to take place on Thursday December 14th at 7.30 p.m. for members of S.A.S.M.E.E.

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Our Annual Christmas barbecue will be held after running is over on December Field Day. As this is open to members families you are invited to attend and make the gathering a success.

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March 31st, 1973, a Saturday, has been set aside to hold a Public Field Day to assist the Diabetic Association to raise funds in order that they can carry on with assistance to sufferers from Diabetes.

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At the November off night meeting Tuesday 28th, the revised rules and constitution will be discussed and offered for adoption or rejection. A good attendance is requested as the matter is of considerable importance.

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'Uncle' Al. is hoping to arrange a tour by members, of the Port Adelaide Treatment works early in the New Year. Further details will be given later.

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S.A.S.M.E.E. NEWS

A demonstration of the many uses of "Loctite" and other products at Bearing Service's premises recently, interested members who attended. Also an inspection of the S.A. Railways Train Control Room a few weeks ago gave us an introduction into the intricacies of running a railway system.

Both tours were well attended and greatly enjoyed.

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David Price delivered an interesting talk and showed slides of his experiences in Antarctica. We look forward to another of his experiences in Malaya in the future.

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It is pleasing to record that Mr. Geo Nicolson of 'Tregelana' station has consented to become a Vice Patron of S.A.S.M.E.E. Mr. Nicolson has been a good friend to us and with his acceptance of this Office we look forward to further strengthening of the bond which has always existed between him and SASMEE.

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The recent Sunday Field Day during Show week was greatly enjoyed by members but owing to numerous other attractions the public attendance was only fair.

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The Field Day given in aid of Spina Bifida attracted a good crowd and resulted in a useful sum of money raised.

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MODEL ENGINEER CAR STICKERS.

Club Secretaries are advised that these are now available, price; 20 cents each

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Mr. F. Hercus delivered an interesting talk at the October meeting on his early efforts to construct a metal turning lathe.

Comparing his efforts with that of a modern well equipped modellers workshop he surely had the heart of a lion. He also touched briefly on his factory's latest production of lathes and machine tools.

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At the time of writing our new turntable and steaming-up-bay was nearly operational. By the time you read this, filling would have been spread around the various bays and the area generally tidied up. Flooring of the adjacent shed is probably the next job and completing the fitting up of a wash basin, shower and the necessary switchboard and wiring. When Completed it will add greatly to the convenience of members.

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The unfortunate accident which Tom Englad suffered when some scatterbrained idiot placed an obstruction on the track, causing considerable damage to his engine, highlights the necessity for far greater supervision of the track and the attending public. Admittedly the promised supervision on this particular occasion was lacking, but on our own Field Days difficulty is experienced in this direction. To those members who do not run a loco we appeal for their attendance to assist in this direction. Recently joined members would find that here is an excellent way to become known to older members and each other and contribute to the safe running of Field Days.

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Planning for the coming Convention is well under way and the efforts of the Committee concerned are aimed at the goal of making it a great success. A news letter has already been sent to the various societies and others will follow in due course.

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CLAUDE MILLER'S SETOVER TAIL STOCK CENTRE.

Owing to pressure of work on the copying machines, the plans and instructions for making the centre will not be printed in time for this issue, but will appear in next quarters Bulletin.

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It is the responsibility of owners of boilers both loco and boat to check whether their current certificate is still valid. Safety tests must be carried out every three years: 1½ times W/P hydraulic test, steam accumulation test for safety valves and pressure gauge. Definite arrangements must be made with the boiler inspectors and the onus is on you to see that these tests are carried out at the correct intervals.

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Loco drivers are advised to check their tender and riding truck couplings. The pin joining the units together should have provision made for a split pin or similar device to prevent it working loose and thus causing a runaway engine to get out of control.

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Drivers' attention is drawn to the danger of ignoring the red signal at the tunnel entrance. This can result in trouble under a certain set of circumstances as was explained by Ian Clark.

WELCOME TO NEW MEMBERS:

A warm welcome is extended to the following new members.

|                 |                                   |
|-----------------|-----------------------------------|
| Ron Bloyd       | Interested in Locos               |
| Leonard Blott   | A country member, interest Locos. |
| Andrew Matthews | General Interest in Modelling     |
| James Davies    | Live Steam                        |
| Ronald Bickford | Steam in General                  |
| Peter Cooper    | Steam Locos                       |
| Edwin Langlois  | General Interest                  |
| Grant Taylor    | " "                               |
| M. Hall         | Steam                             |

You are invited to join in all of our activities thus making new friends and adding to the pleasure of Model Engineering.

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VETERAN STEAM ENGINE RESTORED.

Some members may have noticed a large newly-painted green engine with governor sitting in the steam house last field day. This engine once belonged to the Institute of Technology who were on the verge of scrapping it. By some means or other it found its way into SASMEE and the steam house. Its condition before restoration need hardly be described.

During a working bee some weeks ago, I began to dismantle the engine. Having soon been joined by David Brown, I got the engine in pieces. By evening, David Brown sought permission to take the engine home. This having been granted and the engine soon home in the garden shed, many nights were spent cleaning and overhauling it. Faults noticed during this period were :-



VETERAN STEAM ENGINE RESTORED (Contd.)

1. Cracked pinions on the governor - these were brazed together.
2. Broken piston ring - still not repaired.
3. Absence of packing in all glands.
4. General bad wear and neglect.

The last fault was the biggest, and can hardly be expected to be fixed by us, without an extensive workshop, which we lack.

It is hoped it will make a good decoration.

DAVID ATKINSON

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Allan Wallace, stationed at Leigh Creek, gives a brief description of brown coal mining in that area.

Those of us who are live steamers know all too well what a vital part coal plays in our hobby. Therefore I had more than a purely professional interest when appointed to its staff this year. It took time to become accustomed to seeing a truck loaded with more coal than my 3½" Juliet could burn in a lifetime.

The coal is mined entirely by open cut methods the quality etc. making it uneconomical to use sub-surface methods. Large walking dragline excavators, described later, remove the overburden, mainly shale, up to 200 feet deep. Electric Shovels then move into the cut and load the coal into a team of fourteen 30 ton diesel trucks. These carry the large lumps of coal to the crushers, reducing it to a maximum size of 1¼".

It is now stored in three 2000 ton hoppers ready for railing to Port Augusta(180 miles) by Commonwealth Railways who have a contract with ETSA. Trains, 3/4 mile long with 80 trucks carrying 5000 tons eight or nine times a week deliver to Port Augusta Power House. Few visitors fail to be impressed by the draglines as they silently and rather gracefully shift the dirt or slowly walk from place to place, with the little ETSA "ants" in their landrovers, dragging the power cables along after it.

Our two largest machines have 17 and 18 cubic yard buckets and work 3 shifts, seven days a week. The reason being our coal overburden ratio is about 1:4.

Perhaps a few details of our 'Page' dragline will convey some impression of the immensity of the machine. This is our most recent dragline bought from U.S.A. and commissioned 1970. The machine swings a 17 yard bucket weighing 30,000 lbs. when full, on a 230 foot boom. Digs to 145 feet below its own level, dumps at 95 feet above and to a radius of 220 feet. This is the advantage of a dragline compared to other types of excavators. Powered by 3300 volts it uses a 1500 h.p. Ward Leonard D.C. motor control system. Maximum swing speed is about 2 revolutions per minute. The two 'feet' of the machine are 7'-6" wide and 35 feet long, driven by cranks through the side. Taking 7 ft. strides, it will move its 750 ton mass eighteen feet per minute.

Cost is \$1.5 to \$2. million, but if you are really looking for size, the USA have hundreds which make ours look like toys. I hear that when an American talks large draglines, he would be thinking of 150 yard buckets on 300 ft. booms with a machine weight of about 6,000 tons.

Incredible

Allan Wallace.



OLD MEMBER REJOINS SASMEE - BY ALAN FRANKHAM

It was with pleasure that I attended the general meeting on 10-10-72. One reason being that Ron Bloyd was received as a re-joining member and this gave me much pleasure. Ron was with us in the early days and was in the original surveying party. The late Bill Easterbrook, Vic Messer and many others were also members at that time. Ron has always been a nice easy going friendly chap and has a lot of clues when it comes to engineering. I think that he was impressed when he attended the 25th Anniversary, and now he has given most of his hard work away at his engineering business we can look forward to the excellent company of Ron and his wife Margaret who incidentally is also an enthusiast. The other reason for my enjoying the above meeting was for the excellent talk given by Fred Hercus on his first home made lathe. I am sure everyone really enjoyed this talk and it showed how you can get through if you have enough initiative.

These kind of talks are first class, and I hope Fred is able to give us further talks later on. I hope Fred never dies until a dead horse kicks him and when it kicks him I hope it misses him.

Uncle Al.

WHYALLA WEEKEND - by Des. Allen

Well, once again the boys of S.A.S.M.E.E. headed for Whyalla for the long weekend. This year we had a good roll up at 'Tregalana', with all beds full - 23 of us in all, and 2 or 3 stayed in town.

Saturday:

Because of the interest in the 36 and 38 class locos from N.S.W. to mark the opening of the Port Augusta - Whyalla line, the normal Saturday Field day was replaced by a trek to Port Augusta to see and photograph the iron horses, and to follow the 36 class back to Whyalla.

We spent the afternoon at the Whyalla grounds, but unfortunately the dust deterred all but a few hardy souls - Maurie Turner and Ralph Skewes - from running their models.

In the evening, after an enjoyable meal provided by the Whyalla ladies, we returned to 'Tregalana' where the elusive wild pig was once again encountered.

Sunday:

The abovementioned beast was on the scene at 4.30 a.m.; as some of us were unable to go back to sleep a group of 5 braved a trip to Port Augusta with "Leadfoot Lennie" to see the mighty 38 leave on its trip to Marree; the others spent their time at the Whyalla Grounds.

The field day was held in fine weather on Sunday Afternoon and there was a good turn out of locos. We were impressed to see Neil Johns' 5" gauge "Butch" steaming and running very well.



Another completed loco by a Whyalla member was Ron Draper's 3½" "Highland Lassie", although we did not see this one running.

Flood lighting and a rainwater tank were additions to the grounds since our last visit, and these are evidence of the enthusiasm of members of the Whyalla Club.

After tea on Sunday we were entertained and educated by Uncle Al. and Archie. Later that evening a plan for the capture of the wild pig was in hand, but due to circumstances beyond our control this was unsuccessful. But.....there is always next year.

As in other years the weekend was a great success. There are varied reasons for this; the warmth of the welcome extended by the Whyalla boys, the excellent meals provided by their ladies and their active interest in the club; George Nicholson's hospitality in allowing us the use of the shearers' quarters at Tregalana; the friendly atmosphere which always prevails at such times. Whatever the main reasons for this year's success, we are looking forward to another great weekend next October.

Des. Allen.

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John Welch supplies the following -

Did you know that in -

|              |       |       |
|--------------|-------|-------|
| January 1925 | 25000 | locos |
| 1948         | 20000 |       |
| 1958         | 16928 |       |
| 1963         | 8745  |       |
| 1964         | 7039  |       |
| 1965         | 4959  |       |
| 1966         | 2983  |       |
| 1967         | 1685  |       |
| 1968         | 362   |       |

were running in the British Isles.

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CHANGE WHEELS FOR MYFORD LATHE - by Alan Frankham

Recently I had reason to check up on the standard change wheels supplied with a Myford Lathe. Many owners of such lathes were unsure just what wheels they were supplied with or what they should have. I looked up some old catalogues and they only indicated that 14 wheels makes up the set. However I have been able to find out just how the 14 wheels are made up and is as follows :

2/20 tooth  
1/25  
1/30  
1/35  
1/38



PATRON

MR. R.J. FITCH

COMMISSIONER, S.A.R.

VICE-PATRONS

MR. A.W. CROSSMAN  
MR. C. SCHAUMLOFFEL

C.M.E. S.A.R.  
LOCO. SUPERINTENDANT S.A.R.

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Vice-Presidents  
Secretary  
Minutes Secretary  
Treasurer  
Assistant Treasurer  
General Committee  
  
Librarians  
Auditors  
Public Officer  
Host  
Director Field Days  
Supervisors - Loco Track  
                  - Boat Pond  
Boiler Attendants  
Boiler Safety Committee  
  
Sub.Committee - Programme  
                  - Canteen

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Messrs. N. Kernick, J. Wakefield  
Mr. C. Burden  
Mr. D. Irving  
Mr. L. Peckham  
Mr. C.W. Hill  
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          D. Worrell, R. Smyth  
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Messrs M. Turner, J. Wakefield  
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Messrs. A. Brabham, M. Turner,  
          H. Guignon, A. Bradley, O. Thomas  
Mr. A. Frankham  
Mr. J. Moorfield

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